APR 1 5 2005 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Paul C. Wacker et al.

Confirmation No.: 3629

Serial No.:

10/643,386

Examiner: Marc E. Norman

Filing Date:

August 18, 2003

Group Art: 3744

For:

Best Available Copy

PDA CONFIGURATION OF THERMOSTATS

Docket No.:

H0005399US(1161.1124101)

DECLARATION UNDER 37 C.F.R. § 1.131

Mail Stop Amendment Assistant Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the United States Patent and Trademark Office on the date shown below.

Lynn Thompson

Date

We, Paul C. Wacker, Richard A. Wruck, John B. Amundson, and Marcus D. Stoner, as joint inventors in the above-captioned patent application, declare as follows:

This Declaration is to establish completion of the invention of the above-captioned patent application in the United States prior to March 21, 2003, which is the effective date of U.S. Patent Publication No. 2004/0182941 as a reference under 35 U.S.C. § 102(e).

Facts and Documentary Evidence

All work on the inventions included in the above-identified application was completed in the United States.

Application Serial No. 10/643,386 Declaration Under 37 CFR 1.131

The inventions included in this application were completed prior to March 21, 2003. As evidence of this, attached hereto as Exhibits A and B are true and accurate copies of two invention disclosure documents covering the above-referenced invention, except that the dates have been removed. The dates indicated on the two invention disclosure documents as well as the description contained in paragraphs 1-3 therein establish completion of the invention prior to March 21, 2003, which is the effective date of U.S. Patent Publication No. 2004/0182941.

All statements made herein are to my knowledge and are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patents issued thereon.

Respectfully submitted,

Date: 4-15-05

Paul C. Wacker

Paul C. Wacker

Richard A. Wruck

Date: 4-15-05

Date: 4-15-05

Date: 4-15-05

Marcus D. Stoner

Marcus D. Stoner

Application Serial No. 10/643,386 Declaration Under 37 CFR 1.131

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Respectfully submitted,

Honeywell CONFIDENTIAL ATTORNEY-CLIENT PRIVILEGED

invention Record (Docket) No.: H0005399

Origin Date:

SBE: 9952 - ECC NA Bulldings-Bulldings

Control (GV)

Attorney(s): Ansems, Gregory M

File Location: GV - Golden Valley, MN

Title: Using a PDA for configuring a thermostat.

Inventor: Wacker, Paul C

Address: 4335 Goldenrod Lane N., Plymouth,

MN 55442

Phone: 763-954-5324 Fax: 763-954-4447

Citizenship: USA

Inventor: Wruck, Richard A.

Address: 13 South William St, Mount Prospect,

IL 60056

Phone: 847-632-0740 Fax: 847-632-0740

Citizenship: USA

County: Hennepin Supervisor: Don McNally

SSN: ********

Supervisor: Donald McNally

1. Briefly describe the technical or commercial problem or need that this invention is intended to solve. Installer configuration of high end programmable commercial thermostats has become very complex due to all of the features that can be implemented by low cost microprocessors. There is a trade-off between ease of use and complexity of the user interface. Configuration is done once by the installer and usually not required again for the life of the thermostat, whereas the operator interface is used periodically by the building owner/operator and needs to be as user friendly as possible. In the past the installer configuration process has been very obscure and error prone since it has been a secondary function of the operator user interface that partially reused some of the operator interface UI features in an obscure secondary manner that didn't burden the device with extra cost. This was time consuming and error prone, and had to be repeated for each installation.

2. Briefly describe how this invention solves the problem or meets the need.

By removing the thermostat configuration Installer Interface from the thermostat operator interface to a PDA, the following benefits are provided. - Easy to use configuration process with context checking on previous selections so only valid options are presented and errors cannot be made. - Easy to use navigation of thermostat configuration screens. Novice users are directed to the next appropriate parameter entry screen based on the context of previous configuration selections. - Configurations can be done ahead of time and downloaded quickly at installation time. - Similar configurations do not have to be repeated on every device but simply recalled from storage and downloaded. - The PDA based thermostat configuration application generates a code that represents the raw configuration. This code can be recorded (for example on paper) and entered by hand quickly into the thermostat keyboard if a PDA is not available at the job site. - Context dependent control loop tuning. The thermostat PID control loop tuning parameters are automatically adjusted as a function of: equipment type, number of output stages, output type (modulating or discrete) and the HVAC process.

3. Describe how to make and use the invention. Please indicate which embodiment(s) are preferred and describe the best way known to you to practice the invention. Attach relevant documents. (If the invention is a device or process, please provide a drawing or flow chart.) (If you are unfamiliar with the contents and preparation of a patent application, please refer to the Guidelines for the Preparation of Invention Disclosures.

Document(s):

4(a). To the best of your recollection what is the earliest date on which the invention was conceived? Who conceived the invention? Attach documents which evidence the foregoing.

Conception Date:

Who conceived it?: Paul C Wacker

Document(s):

4(b). Is there a non-inventor who witnessed the conception? If so, please identify him/her and attach any documents which evidence the witnessing.

yes

Witness Name: Mike Pouchak

Witness Phone: 763-954-6423 First Practice Documents:

5(a). To the best of your recollection, what is the earliest date on which the invention was reduced to practice (i.e. made)? Who reduced the invention to practice. Attach documents which evidence the foregoing. If no reduction to practice, type "n/a".

First Practice Documents:

First Practice Date:

Who reduced it to practice?:

5(b). Is there a non-inventor who corroborated the reduction to practice? If so, please identify him/her, the corroborating activity (i.e., over-the-shoulder corroboration or repeating the experiment), and the date of the activity. Attach documents which evidence the foregoing.

Non-inventor corroborator?:

First Corroborator

Name:

First Corroborator Phone:

First Practice

Corroboration Date:

First Practice Corroborator Activity:

Document(s) related to corroboration event:

S(c). For each example of the invention and each comparative example on which you intend to rely in the patent application, please indicate when the example was generated, who conducted the experiment and where this example is recorded (e.g., volume, page and author or laboratory notebook) and attach a copy of these records. If no example available, type "n/a". Example(s):

Example Date:

Who conducted the experiment?:

Where is example recorded?:

6(a). Did this invention arise in a program that is funded in whole or part by the U.S. Government or another company, or any entity other than Honeywell?

No

6(b). If so, please identify the program (including government contract number, if applicable) and the entity sponsoring the program and provide a copy of any agreement between the parties concerning the program.

Outside Funding Program:
Contract Number (if applicable):
Outside Funding Entity:
Document(s) related to funding agreement:

7(a). To your knowledge, is this invention subject to any agreement between Honeywell and a third party (e.g., a secrecy agreement, license agreement, joint development agreement, etc.)?

Vitness ame:	Inventor Name:
12. Please indicate keywords for	or identifying this invention disclosure.
11. Please specify the product(s) to which this invention disclosure relates.
Is this an improvement?:	
10(b). If so, please identify the invention: Other patents relate	e related matter and indicate whether this is an improvement on an earlier d matter is:
10(a). Does this invention rela previously submitted invention	te to any other: (i) issued patents, (ii) pending patent applications, or (iii) disclosures, of Honeywell?
For whom are future sales plan Date future sale is planned:	nπed:
9(c). Does the business intend the general public in the near	to disclose, sell or offer to sell the invention to anyone outside of Honeywell or to future? If so, to whom and when is this disclosure, sale or offer for sale planned?
Disclosure Sales Agreement?: Document(s) which evidence	the sale or offer for sale:
Date it was disclosed: Whom disclosed to:	
agreement in place? Attach di	n was it disclosed, sold or offered for sale? If it was disclosed, was a secrecy ocuments which evidence the sale or offer for sale.
9(a). Has the product or proce for sale to anyone outside of I	ess which is the subject of this invention disclosure been disclosed, sold or offered doneywell or to the general public.
How invention is different fro	om the prior art:
aware. Please list all such pri	e to the U.S. Patent and Trademark Office all relevant prior art of which you are or art (e.g., patents, publications, brochures, Honeywell and third-party products) earch has been conducted, it must be included. Briefly indicate how this invention See I and 2 above.
Document(s) related to any the	nird party agreement:
Third party agreement ID: Third party name:	
avallable.	agreement and the other party and attach a copy of the agreement if one is

Witness Signature:	Inventor	
Date:	Date:	
Inventor	Inventor	
Name:	Name:	
Inventor	Inventor	
Signature:	Signature:	
Date:	Date:	
Inventor	Inventor	
Name:	Name:	
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Signature:	Signature:	
Date:	Date:	····
Inventor	Inventor	
Name:	Name;	··
Inventor	Inventor	
Signature:	Signature:	
Date:		
Send to:		

Send to:
Gregory M Ansems
1985 Douglas Drive N.
Golden Valley, MN 55422-3992
The attorney assigned to this disclosure.

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Honeywell CONFIDENTIAL ATTORNEY-CLIENT PRIVILEGED

Invention Record (Docket) No.:

H0005442

Origin Date;

SBE: 9950 - Gldn Valley - MN, THERMOSTATS

& HOME CONTROL

Attorney(s): Ansems, Gregory M

File Location: GV - Golden Valley, MN

Title: Delta - Download custom contractor logo and phone number

Inventor: Amundson, John B

Address: 10370 51st PL N, Plymouth,

SSN: **********
County: Hennenin

MN 55442

Phone: 763-954-4459 Fax: 763-954-4112

Supervisor: Chris Okey

Citizenship: US

Inventor: Stoner, Marcus D

Address: 15601 Highland Hts. Dr.,

SSN: ********

Minnetonka, MN 55345

Phone: 763-954-5014 Fax: 763-954-4112

County: Hennepin Supervisor: Chris Okey

Citizenship: USA

- 1. Briefly describe the technical or commercial problem or need that this invention is intended to solve. Existing Honeywell Thermostats have a door on which a contractor logo/phone number sticker can be place inside. The new Delta thermostats do not have a door to conceal the contractor logo and phone number.
- 2. Briefly describe how this invention solves the problem or meets the need.

 This invention allows contractors to transfer an electronic logo and telephone number to be shown on the thermostats display. The logo may be transfered via a connection to a PDA (see H0005399 and H0005400) or a compact protable memory media.
- 3. Describe how to make and use the invention. Please indicate which embodiment(s) are preferred and describe the best way known to you to practice the invention. Attach relevant documents. (If the invention is a device or process, please provide a drawing or flow chart.) (If you are unfamiliar with the contents and preparation of a patent application, please refer to the Guidelines for the Preparation of Invention Disclosures.

See attached flow chart

Document(s):

H0005442 MU1 H0005442 - DownloadContractorInfo.pdf

4(a). To the best of your recollection what is the earliest date on which the invention was conceived? Who conceived the invention? Attach documents which evidence the foregoing.

Conception Date:

Who conceived it?: John Amundson

Document(s):

4(b). Is there a non-inventor who witnessed the conception? If so, please identify him/her and attach any documents which evidence the witnessing.

Witness Name:

Witness Phone: Document(s):

WIDS

5(a). To the best of your recollection, what is the earliest date on which the invention was reduced to practice (i.e. made)? Who reduced the invention to practice. Attach documents which evidence the foregoing. If no reduction to practice, type "n/a".

First Practice Date:

Who reduced it to practice?: Document(s):

5(h). Is there a non-inventor who corroborated the reduction to practice? If so, please identify him/her, the corroborating activity (i.e., over-the-shoulder corroboration or repeating the experiment), and the date of the activity. Attach documents which evidence the foregoing.

Non-inventor

corroborator?:

First Corroborator

Name:

First Corroborator Phone:

First Practice

Corroboration Date:

First Practice Corroborator Activity:

Document(s) related to corroboration event:

¢

5(c). For each example of the invention and each comparative example on which you intend to rely in the patent application, please indicate when the example was generated, who conducted the experiment and where this example is recorded (e.g., volume, page and author or laboratory notebook) and attach a copy of these records. If no example available, type "n/a". Example(s):

Who conducted the experiment?:

Where is example recorded?: Document(s):

6(a). Did this invention arise in a program that is funded in whole or part by the U.S. Government or another company, or any entity other than Honeywell?

6(b). If so, please identify the program (including government contract number, if applicable) and the entity sponsoring the program and provide a copy of any agreement between the parties concerning the program.

Outside Funding Program:

Contract Number (if applicable):

Outside Funding Entity:

Document(s) related to funding agreement:

7(a). To your knowledge, is this invention subject to any agreement between Honeywell and a third party (e.g., a secrecy agreement, license agreement, joint development agreement, etc.)?
Yes

7(b). If so, please identify the agreement and the other party and attach a copy of the agreement if one is available.

Third party agreement ID: P-2298.3

Third party name: Hauser Design Inc

Document(s) related to any third party agreement:

H0005442 TPD TPD P-2298.3 Pegasus.pdf

WIL

8. You have a duty to disclose to the U.S. Patent and Trademark Office all relevant prior art of which you are aware. Please list all such prior art (e.g., patents, publications, brochures, Honeywell and third-party products) known to you. If a prior art search has been conducted, it must be included. Briefly indicate how this invention is different from the prior art. See 1 and 2 above. List of prior art:

How invention is different from the prior art: 9(a). Has the product or process which is the subject of this invention disclosure been disclosed, sold or offered for sale to anyone outside of Honeywell or to the general public. 9(b). If so, when and to whom was it disclosed, sold or offered for sale? If it was disclosed, was a secrecy agreement in place? Attach documents which evidence the sale or offer for sale. Date it was disclosed: Whom disclosed to: Disclosure Sales Agreement?: Document(s) which evidence the sale or offer for sale: 9(c). Does the business intend to disclose, sell or offer to sell the invention to anyone outside of Honeywell or to the general public in the near future? If so, to whom and when is this disclosure, sale or offer for sale planned? For whom are future sales planned: Date future sale is planned: 10(a). Does this invention relate to any other: (i) issued patents, (ii) pending patent applications, or (iii) previously submitted invention disclosures, of Honeywell? Yes 10(b). If so, please identify the related matter and indicate whether this is an improvement on an earlier invention: Other patents related matter is: H0005399, H0005400 Is this an improvement?: Yes 11. Please specify the product(s) to which this invention disclosure relates. Deltat Thermostats; T7350 commercial thermostat 12. Please indicate keywords for identifying this invention disclosure.

Witness Name: Representation of the state o	Inventor Name: John Amundson
Witness Signature: Laha Bergma	Inventor Signature:
Date:	Date:

APR-15-2005	16:21
WIDS	

CROMPTON SEAGER TUFTE

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P.23

Inventor Inventor Name: Name: _ Inventor Inventor Signature: Marcus D. Signature: Date: __ Date: Inventor Inventor Name: __ Name: _ Inventor Inventor Signature: ____ Signature: ___ Date: _____ Inventor Inventor Name: ____ Name: _ Inventor Inventor Signature: Signature: Date:

Send to: Gregory M Ansems 1985 Douglas Drive N. Golden Valley, MN 55422-3992

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